

Reshaping Scientific Research

The world's oceans are at the forefront of the conversation surrounding how to slow, stop, or reverse climate change. Ocean health is currently one of the most highly studied areas in climate science. Oceans simultaneously serve as one of the most reliable indicators of environmental health and are one of the most negatively impacted areas via climate change. However, a significant portion of scientific research performed in relation to ocean health solely documents negative effects while offering few solutions or calls to action for ocean protection. Oceans are also the focus of many dramatic, last-ditch efforts to save earth from the damaging effects of runaway climate change.

The health and temperatures of the world's oceans are closely linked to global warming. According to the National Oceanic and Atmospheric Administration, roughly 63% of the stored heat in the earth's climate is accounted for by the upper oceans. Oceans are the first to absorb the increased heat of a warming earth, thus damaging marine life and exacerbating the effects of global warming. Statistics such as these are dramatic and daunting to laypersons and oceanic scientists. Jane Lubchenco argues that scare tactics and dramatic statements of declining oceanic health have debilitating effects. Instead, she argues, scientists and academics should be helping to create solutions and catalyze mobilization for the future health of oceans and the earth.

The nature of academia is such that diagnoses are vastly more common than treatments. The urgency of global warming has cut into the purely analytical nature of some scientific research in search of solutions to a massive global problem. Rather than simply noting the changes in ocean and earth health, scientists are being asked to offer possible solutions on individual and systemic scales. The best chance at a successful ecological recovery is with the aid of experts. The responsibility of scientists now extends to providing helpful research as well as developing solutions that can be enacted by individuals and organizations on a daily basis. In other words, scientists must begin to provide use-inspired science to mobilize rather than petrify readers.

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